DOCUMENT RESUME

ED 377 443 CS 011 905

TITLE	Project Read Write.
INSTITUTION	Newark Board of Education, N.J.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC. National Diffusion Network.
PUB DATE	[86]
NOTE	37p.; A NDN Developer/Demonstrator Project.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Basic Skills; Demonstration Programs; Elementary Education; Program Descriptions; *Reading Comprehension; *Reading Improvement; Reading Programs; Reading Research; Reading Writing Relationship; Student Attitudes
IDENTIFIERS	Newark Board of Education NJ

ABSTRACT

This compilation presents material related to Project Read-Write, a basic skills program for grades 2-7 which utilizes students' attitudes and experiences and is designed to promote total reading comprehension through writing. It is noted in the compilation that although the program was developed in an urban area (Newark, New Jersey), it can be supplied in suburban and rural areas as well. The first section of the compilation presents a description of the project. Sections of the "Teacher's Resource and Instructional Manual" associated with the project are included. The next section presents sample teaching strategies concerning building sight vocabulary, main idea, event sequence, character analysis, and mood. The final section of the compilation presents a research report conducted with 3,000 students across 6 grades and 174 classes during 2 years concerning the effectiveness of the project, noting that Read-Write students (including Chapter I students) significantly outperformed the norm group on a standardized measure of reading comprehension. (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 377 443

QUANTITY	ITEM	UNIT PRICE	AMOUNT

Please make checks payable to:
Newark Board of Education/
Project READ-WRITE

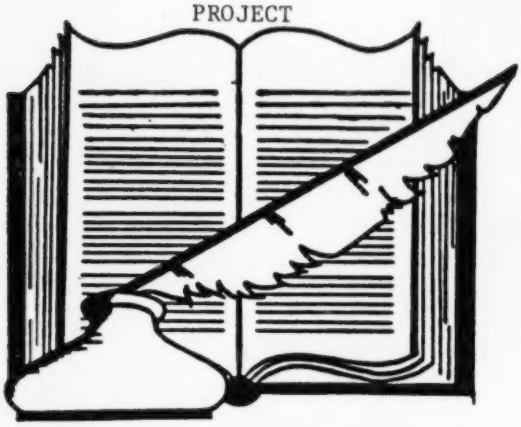
Subtotal _____
Shipping _____
Total _____

Project READ-WRITE
Newark Board of Education
2 Cedar Street, 7th Floor
Newark, New Jersey 07102

PLACE
STAMP
HERE

PROJECT

Read Write



AN NDN DEVELOPER DEMONSTRATOR PROJECT

BOARD OF EDUCATION
NEWARK N.J. 07102

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it
☐ Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

BEST COPY AVAILABLE

CS011905

30

Project READ-WRITE is a basic skills program designed to promote total reading comprehension through writing. It involves a psycholinguistic approach which utilizes students' attitudes and experiences. It can operate within the regular reading program with materials that are already being used in the classroom.

Members of the Project staff are available for teacher training which consists of a one-day workshop focusing on the philosophies and strategies used in implementing the project. Teachers can begin to implement project Read-Write immediately following training.

GOAL

To promote total comprehension in reading.

OBJECTIVES

To provide teachers with innovative, systematic ways of tapping children's personal resources.

To offer students opportunities to listen, speak, write, and rewrite in relation to the reading experience.

To provide the students with avenues for both divergent and convergent thinking.

ESSENTIAL ELEMENTS

- o Use a checklist of commonly accepted reading skills.
- o Diagnose and prioritize needs.
- o Apply prescriptions from the READ-WRITE manual on a consistent basis.
- o Maintain ongoing records of students' progress.

PROJECT READ-WRITE is

- o nationally validated for grades 2-7.
- o validated by the New Jersey State Department of Education.
- o adaptable to existing curricula, grades 2-12.
- o useful in the content areas.
- o suitable for being applied developmentally, correctively, or remedially.

PROJECT READ-WRITE promotes

- o literal comprehension
- o inferential comprehension
- o critical comprehension
- o creative comprehension

SERVICES PROVIDED

- o awareness presentations
- o in-service training
- o technical assistance
- o consultant services
- o follow-up assistance
- o demonstration site visits

MATERIALS AVAILABLE TO ADOPTERS

- o Resource and Instructional Manual $30.00
- o Trainer's Manual $50.00
- o READ-WRITE In The Home (pack of 25) $10.00
- o Awareness Flier FREE

For Further Information Contact:

Mr. Frederick McCarthy
Project Director
Project READ-WRITE
Newark Board of Education
2 Cedar Street
Newark, New Jersey 07102
(201) 733-7112

?

PROJECT DESCRIPTION

Project READ-WRITE is a validated, successful basic skills program in reading and related language arts, designed to reverse the trend of diminishing reading proficiency in the intermediate and upper grades. Although developed in an urban area, it can be applied in suburban and rural districts as well.

It can be used in connection with, or as a supplement to, any already existing reading program, at minimal cost to schools. It can be employed within developmental, corrective, remedial, or diagnostic reading programs. It can be used not only within regular reading instruction periods, but also throughout the content areas. The program utilizes a language-experience approach, promoting affective as well as cognitive learning, and integrates speaking, listening, and writing with reading activities. The numerous prescriptive strategies of the program cover the entire range of major reading needs: from phonics, structural analysis, and vocabulary development, to inferential, critical, creative and literal comprehension. Each strategy promotes several ancillary skills as well as one major skill. The strategies are intensified through a variety of language-manipulation techniques, themselves designed to enhance specific reading skills. This program can be utilized to meet local objectives in reading in any school district, as mandated for "Thorough and Efficient" education, in grades 2-12.

Upon request of local school systems, the Project READ-WRITE staff will present workshops designed to familiarize educators with the goals and implementation of the program.

ACTIVITIES AND STRATEGIES OF THE PROGRAM

As explained in the Teacher's Resource and Instructional Manual, there are specific techniques and strategies contained in the program with which the educator should become familiar. The basic techniques, which are presented first, form the foundation of the prescriptive strategies. All the techniques and their applications are presented on pages 37-53 in the Teacher's Resource and Instructional Manual.

Examples of some of the basic techniques are reproduced on pages 3-5.

ALL GRADES

SENTENCE SYNTHESIS

Sentence Sense, Main Idea, Build Sight Vocabulary

The student develops meaningful sentences and/or paragraphs through a creative and logical arrangement of words which you supply. These words can be taken from reading, language arts or content area lessons, and should include high-interest words as well as needed vocabulary.

E.g. students teachers learn school

Many teachers believe that students who come to school well rested learn more than students who are tired.

assignment school teacher novel
completed interpretation essay provided

Bill completed the homework assignment his teacher had given and brought it to school the next day. The teacher told Bill that his essay provided a novel interpretation of the topic.

ALL GRADES

THE FRAMED PARAGRAPH - ALL READING OBJECTIVES

The student fills in the slots, sentence by sentence, within a skeletal paragraph which is constructed to help him/her develop specific reading skills or concepts. The words, phrases, or clauses that go into slots are chosen by the student--as if he/she were answering questions--and they may come from what is stated or implied in a reading selection, or from the student's personal opinions or experiences.

E.g. Mr. Johnson, a _____ from _____ in _____, went to the _____ of the _____ in _____, in order to _____ the _____ city. He felt _____ at _____ _____. He decided that _____ _____ because _____.

Mr. Johnson, a farmer from a small town in Nebraska, went to the top of the Empire State Building in New York, in order to get a view of the tremendous city. He felt amazed at how far he could see into the distance. He decided that he would bring his children there next year because they would enjoy the sight as much as he did.

ALL GRADES

EXPANSION

Main Idea, Inference, Descriptive Details, Supporting Details, Character Analysis, Place and Time Setting, Cause-Effect, Event Sequence, Sentence Sense, Figurative Language.

The student adds descriptive and supporting details to his/her reading-related composition by answering--in words, phrases, or clauses--as many of the following questions as he can: Who?, What?, Where?, When?, Why?, What kind of?, Which one?, How much (many)?. He/She may get these details from what is stated in a reading, infer them, or express a personal judgement. He/She also decides where the information is to go within his sentences. For additional detail, the student may be encouraged to add whole sentences or even paragraphs to his composition.

E.g. (original sentence)
The boy ran to the park.

(expanded sentence)
Yesterday, April 20, the tall, young
when when what kind of
handsome boy named Joe quickly ran to the
who how
huge, tree-lined park around the corner
what kind of where
from his house in order to meet his three
why
friends, John, Paul, and Ed.
who who who who

Once the basic techniques are understood, the teacher should move, as quickly as possible, to the prescriptive strategies, called prescriptions, which have been designed to teach specific reading skills. Using writing as a springboard, so that students become involved in many facets of the language arts activities, the prescriptions emphasize literal, inferential, critical, and creative thinking to promote reading comprehension.

Several skills are presented in one prescription; all involve speaking and listening, as well as writing. Often, they focus directly on reading selections from commercial reading instructional materials, literature, or the content areas. Almost any kind of reading material, including magazines and newspapers, can be utilized. The prescriptions encourage the students to use their own experiences, feelings, ideas, perceptions and interests since the learner, himself, is the major resource of Project READ-WRITE. Effort has been expended in order to make these prescriptive strategies practical. They have been tested, revised, and expanded by classroom teachers in typical classroom situations; all have been carefully reviewed by the Project READ-WRITE staff.

In general, teachers should select prescriptions which will meet the prioritized needs of their students and address the skills required to be learned. With developmental materials such as basal readers, prescriptions can be chosen to correlate with the skills identified in the teacher's

manual for each particular lesson. With diagnostic, corrective, and remedial teaching, prescriptions should be chosen on the basis of individual student needs. Project READ-WRITE prescriptions facilitate the teaching of many skills which are included in most commercial reading materials and tests. An index of all the skills embodied in the prescriptions is contained in the Teacher's Resource and Instructional Manual, and has been reproduced on pages 8-10.

INDEX

Analysis	
character	185-205
phonic	67-87
structural	88-132
Application of prescriptions	9-20, 321-337
Author's purpose	271-272
Blends	71-75
Book reports	310-311
Build sight vocabulary	110-121
Cause-effect	206-213
Character analysis	185-205
Checklist	27-36
use of	24-26
Comparative and superlative	128
Comparison/contrast	222-230
Comparison/contrast outline	52-53
Compound words	97-101
Comprehension, rate of	296-298
Conclusions, forming	254-258
Consonant digraphs	76-81
Context clues	122-124
Contractions	102-106
Descriptive details	181-184
Descriptive outline	50
Diagnosis	20-22
Diagnostic guidelines	22-23
Dictionary skills	299-309
Digraphs, consonant	76-81
Directions, following	138-140
Directions, listening to	65-66
Embedding	46
Event sequence	169-179
Expansion	41
Expository outline	51
Fact vs. opinion	279-287
Fantasy, reality and	288-291
Figurative language	292-295
Following directions	138-140
Forming conclusions	254-258
Framed paragraph	40
Graphs and charts, interpreting	318
Helping the non-reader/non-writer	319-320
Idea, main	146-168
Identify plot, follow plot	214-221
Inference	241-253
Interpretation of graphs and charts	318
Intonation	133-135

Listen to directions 65-66
Language, figurative 292-295
Main idea 146-168
Map reading 316-317
Mood 233-240
Movability 45
Motivation for reading 54-55, 57
Narrative outline 48-49
Non-reader, non-writer 319-320
Oral reading 133-137
Outcomes, predicting 259-263
Outlines:
- comparison/contrast 52-53
- descriptive 50
- explanation of 47
- expository 51
- narrative 48-49

Overview, Project READ-WRITE 1
Phonic analysis 67-87
Phonograms 67-70
Phrasal reading 136-137
Plot, identify and follow 214-221
Plural suffixes 88-96
Point of view 273-278
Possessives 127
Predicting outcomes 259-263
Prefixes 107-109
Prepositions 129-132
Prescriptions:
- application of 9-20, 321-337
- collection of 54-318
- selection of 6-9

Previewing 56-58
Pronouns 125-126
Purpose, author's 271-272
Rate of comprehension 296-298
Rationale of program 2-5
Readiness 59-66
Reading
- map 316-317
- motivation for 54-55, 57
- oral 133-137
- phrasal 136-137

Reality and fantasy 288-291
Reduction 42
Reference books, use of 312-315

Reports, book	310-311
Selection of prescriptions	6-9
Sentence sense	141-145
Sentence synthesis	39
Sequence of events	169-179
Setting, story	180
Sight vocabulary	110-121
Similes	294-295
Skills:	
dictionary	299-309
study	299-318
Skimming	264-270
Slotting	43
Story setting	180
Structural analysis	88-132
Study skills	299-318
Suffixies, plural	88-96
Symbolism	292-293
Techniques	37-53
Time span	231-232
Variant vowel sounds	84-87
Vary rates of comprehension	296-298
Vocabulary, sight	110-121
Vowel sounds	82-87

ALL GRADES

STRUCTURAL ANALYSIS: BUILD SIGHT VOCABULARY

(Also: Context Clues, Synonyms)

The following prescription can be used to reinforce newly acquired vocabulary:

After you have introduced the vocabulary, and the children have some idea of how each word can be used in context, write a paragraph or short story on the board incorporating synonyms for the newly learned words. The children are to substitute one of their newly learned words for each underlined word in the paragraph or story.

E.g. Newly learned vocabulary:

explorers	desert	awkward	gait
expedition	party	reared	procession
lagged	caravan	hostile	plains

Replace each of the underlined words with one of the above vocabulary words.

> A group of searchers set out on a journey across a hot, sandy wilderness, fearing they might meet unfriendly natives who were reported to be living on the prairies. The clumsy-looking camels moved forward at a slow pace, and the parade spread out for miles. The group of travelers continued on its way, and finally reached its destination. The only problem was that one of the camels backed up, not wanting to go any further, and finally lingered behind so long that it became lost.

Have the children use expansion, slotting, movability, and/or embedding on their stories, as well as additional

sentences. When compositions are read aloud, the other members of the class decide whether or not the synonyms and vocabulary words have been used correctly.

This process can be reversed, using the vocabulary words in the paragraph, and having the children replace each vocabulary word with a synonym. Have the children apply the techniques on these compositions and add extra sentences.

INTERMEDIATE AND UPPER GRADES

MAIN IDEA

(Also: Story Setting, Cause-Effect, Supporting Details, Problem Solving)

The following frame can be used with most reading selections, regardless of their source (basal reader, newspaper, content area, in order to help students recognize the main idea.

The name of the story is _____(title)_____.
The main characters are _____(who)_____
_____. The story takes place _____
_____(where/when)_____. The problem in the story
is that _____(what)_____
_____. The problem is solved _____
_____(how)_____. The
part of the story I liked best is _____
_____(what)_____.

Have the frame read orally and discuss it with the students in terms of main characters, setting, problem and solution, before you ask them to complete it.

1. Main characters--These are the most important people in the story. In some stories, these characters may be animals. These are the ones who, if omitted from the story, would materially alter the reader's interpretation of what takes place and why. It may be helpful to ask the children what effect the omission of various characters would have on the story, and why. Any character whose omission does not affect the story

very much is not a main character. In supplying this information within the context of the framed paragraph, the students should answer the question Who?

2. The story takes place (Where/When). Depending on the story, either the time or place setting or both may be given explicitly. If the setting(s) changes, you should tell the children whether you want them to note the change(s) or to use the setting(s) in which the most important part of the story occurs. If neither setting is given explicitly, you may want to have the students infer where or when the story takes place, stating their reasons for selecting a particular time and/or place.

3. Problem--The problem should be explained as something to be overcome or accomplished: what has to be done to or by the main character(s), so that the story can come to an ending. In completing this part of the framed paragraph, the children are answering the question What about the problem.

4. Solution--Here, you want the children to tell how the problem was overcome or accomplished.

The main idea of the story will be elicited when the children state the problem and solution. After the framed paragraph has been completed, encourage the children to elaborate, using expansion, slotting, movability, and/or embedding. Stress the "Why" question in the expansion.

ALL GRADES

EVENT SEQUENCE

(Also: Main Idea, Descriptive Details, Identify Plot / Follow Plot)

In order to help the students to recognize and interpret the event sequence of a story, you might want to use the narrative outline or begin by asking them to respond to the following questions.

Who? (main character): _____
Where? (setting): _____
When? (time setting): _____
What happened first? _____
What happened next? _____
What happened, etc.? _____
What happened last? _____

After responses have been elicited, have the students use this information to complete a framed paragraph like the one below.

The story, ___(title)___, takes place ___(where and when)___. The first thing that happens in the story is _____ _____.
Next, _____(what happens)_____.
After this, _____(what happens)_____.
Following this, ___(what happens)___.
Finally, _____(what Happens)_____.

Have the students read their completed frames orally. Encourage them to develop their compositions further by including more events, and through the use of expansion, slotting, movability, and/or embedding.

As the students become more familiar with the concept of event sequence, you may wish to use only the framed paragraph or the narrative outline. Use the suggested list of questions for slower or younger readers. The framed paragraph should be used for those students who have demonstrated little or no difficulty in responding to the outline or the questions.

INTERMEDIATE AND UPPER GRADES

CHARACTER ANALYSIS

(Also: Making Judgements, Supporting Details, Cause-Effect)

In order to help students develop an understanding of what is meant by the term "main character(s)," the following type of frame can be used. Upon completing the frame, students will understand that the "main character(s)" is essential to the entire plot of the story. In other words, the "main character(s)" cannot be taken out of the story without changing or affecting the plot in some significant way.

In most cases, the main character(s) appears throughout the story. The frame will help students to recognize this, as well as guide the students to ask themselves what each of the main characters does in each part of the story that makes him/her important.

E.g. A character who could not be taken out of the story is __(who)__. He is important in the beginning of the story because __(why)__.

In the middle of the story, he/she __(does what)__, which is important because __(why)__.

At the end of the story, it is __(who)__ who __(does what)__, which makes it possible for __(what to happen)__.

Without _____(who)_____, _____(what)_____

_____

would not be possible because ___(why)_____

_____.

Have the students apply additional expansion and slotting, as well as movability and/or embedding, to these paragraphs. Encourage them to include additional sentences, also, to develop their ideas about the main character(s).

Have the compositions read aloud, and let the rest of the class decide whether the writer's opinions correspond to what the original reading stated or implied.

UPPER GRADES

CHARACTER ANALYSIS

(Also: Descriptive Details, Supporting Details, Cause-Effect, Event Sequence, Mood)

In analyzing the main characters of a story, it may not always be possible to do so in a single statement about each of them. Often, it may be necessary to follow the characters as the story unfolds, noting changes in their personalities and behaviors. The following is a frame which will aid in achieving this end. Guide the students in filling it out the first time it is used. In this way, the students will not become confused as to which characters they are being asked to comment upon at any given point.

It might prove helpful to prepare a chart like the one below on the board prior to completing the frame:

	Character(s)	What kind of mood, feeling or emotion?	Actions
beginning			
middle			
end			

Discuss the filled-in chart with the students in terms of the characters and their respective moods, actions, and behavioral patterns. Then have them use this information to complete the frame.

In the story _____(title)_____
the main characters are _____(who#1)_____,
_____(who#2)_____, and _____(who#3)_____.
In the beginning of the story, _____(who#1)_____
seems very _____(what)_____. He/She
shows this by _____(doing what)_____
_____.
_____(who#2)_____ seems to be
very _____(what)_____ or _____(what)_____
because he/she _____
_____.
_____(who#3)_____ is very
_____(what)_____. He/She shows
this by _____(doing what)_____
_____.
In the middle of the story, _____(who#1)_____
_____(does what)_____,
which shows he/she is very _____(what)_____.
_____(who#2)_____ shows he/she is
_____(what)_____ by _____(doing what)_____.
When _____(what happens)_____, _____(who#3)_____
shows he/she is very _____(what)_____ by
_____(doing what)_____.
At the end of the story _____(who#1)_____
is more/less _____(what)_____.
This is demonstrated when he/she _____(does what)_____.
_____(who#2)_____ is very _____(what)_____.

INTERMEDIATE AND UPPER GRADES

MOOD

(Also: Inference, Build Sight Vocabulary, Character Analysis, Descriptive Details)

After the children have finished reading a story that exhibits a definite mood (fear, joy, wonder, surprise, sadness, etc.) have them write a composition from the following framed paragraph:

E.g. As I read (title of story), I felt very _____ because _____. This feeling was strongest in the part of the story when _____, because _____ _____. It was almost as strong when _____.

My feeling (or mood) would have been changed to _____ if the story had been altered so that _____ _____, instead of _____.

As I remember (or glance back over) the story, some descriptive words that the author used to help me feel the way I did were: _____, _____, _____, _____, etc.

My feeling (or mood) might have been different if these words had each been changed to: _____, _____, _____, _____, _____, etc.

Have the children use expansion and/or slotting on these compositions (along with movability and/or embedding) to bring in descriptive detail which will help them to crystallize their feelings as they write or rewrite. Encourage them to include additional sentences to help explain

their ideas. Then have the children read their compositions aloud and compare their feelings (moods) and the reasons for them.

SUGGESTED FOLLOW-UP

To help reinforce the concept of mood, ask the children to choose an item from a list of moods and write individual compositions expressing the mood which was selected. Let them use the techniques--especially expansion and slotting. Then have the class exchange papers and identify the mood by applying the framed paragraphs on the preceding page.

Project READ-WRITE

Abstract

Project READ-WRITE is a reading comprehension program in Newark, NJ which was designed for students in grades 2-7. The program fosters an integrated language arts approach which utilizes writing strategies and oral language activities to develop students' reading comprehension skills. It is designed to augment and enhance the capabilities of a district's basal reading program, and can be implemented by adopting school districts for a minimal cost.

Using the norm-referenced design with a yearly testing cycle (Spring-to-Spring), project staff have demonstrated that READ-WRITE students significantly outperform the norm group on a standardized measure of reading comprehension. Data were gathered from 3,000 students across six grades and 174 classes during two years of program implementation. All comparisons were significant at the .001 level with effect sizes exceeding one-third standard deviation. In addition, comparisons with national Chapter I data indicated that the gains made by READ-WRITE students were significantly higher (.01) than those of Chapter I students throughout the country.

PROGRAM AREA: READING

I. PROJECT TITLE/LOCATION: Project READ-WRITE
Board of Education
Division of Special Projects
2 Cedar Street
Newark, NJ 07102
(201) 733-7116

II. DEVELOPED BY: Project READ-WRITE Staff; Frederick McCarthy, Director

III. SOURCE AND LEVEL OF FUNDING:

YEAR	TITLE III	TITLE IV-C	R & D	TOTAL
1973-1974	46,979.00			46,979.00
1974-1975	57,723.00			57,723.00
1975-1976	54,989.00			54,898.00
1976-1977		97,749.00		97,749.00
1977-1978		68,659.00	104,988.00	173,647.00
1978-1979		146,409.00		146,409.00
1979-1980		148,416.00		148,416.00
TOTALS	159,600.00	461,233.00	104,988.00	725,821.00

IV. YEARS OF INTERVENTION DEVELOPMENT: Project READ-WRITE was originally developed during the 1973-1976 school years, and refined in the 1976-80 school years. Effectiveness data are presented for the most recent years of the project, 1983-1984 and 1984-1985.

V. BRIEF DESCRIPTION OF PROJECT: Project READ-WRITE is a reading comprehension program in Newark, NJ which was designed for students in grades 2-7. The program fosters an integrated language arts approach which utilizes writing strategies and oral language activities to develop students' reading comprehension skills. It is designed to supplement and enhance the capabilities of a district's basal reading program, and can be implemented by adopting school districts for a minimal cost.

A. PROGRAM CONTEXT

Demographics:

Newark, NJ is an urban community covering 24.14 square miles. The 1980 census reports that Newark's population is 329,248 persons with 58% of that population being Black, 19% being Hispanic 31% being White and 1% as "Other". Note that the total exceeds 100 per cent because some Hispanics also have been counted as Black or White.

The total elementary school enrollments for 1983-1984 and 1984-1985 were 34,436 and 33,854 respectively. The Newark elementary schools range in size from approximately 230 to 1500 students. Most schools encompass kindergarten through grade eight, but some house only kindergarten through grade four and others kindergarten through grade six. The average class size is 23, and the student-teacher ratio is 23 to one.

The average per pupil expenditure in this school district was $3,759.00 during 1983-1984 and is estimated at $4,000.00 for 1984-1985. The elementary school enrollment for 1983-1984 was categorized as 65% Black non-Hispanic, 25% Hispanic, 9% White non-Hispanic, and 1% Other. The enrollment for 1984-1985 was categorized as 64% Black non-Hispanic, 26% Hispanic, 9% White and 1% Other.

Intended Target Population/Program Participants:

Project READ-WRITE is intended for all students in grades 2-7. As the program has been implemented and tested in the Newark Public Schools, it is appropriate to note that the population served by the program has been predominately educationally and economically disadvantaged students from an urban community, including both Chapter I and non-Chapter I students.

Project READ-WRITE served children from 35 elementary schools during the 1983-1984 and 1984-1985 school years. Students attending many of these schools live in neighborhoods characterized by extensive public housing and deteriorating living conditions. During the two years of the study, approximately 54% of Newark's students came from low-income families.

B. PROGRAM GOALS

The overall goal of Project READ-WRITE is to increase achievement in reading comprehension through an integrated language arts approach that utilizes writing and/or oral language activities. The program also strives to serve large numbers of students in an efficient and cost-effective manner.

C. SPECIFIC CLAIM OF EFFECTIVENESS

Compared to the publishers' national norm group, students enrolled in Project READ-WRITE demonstrated a significant increase in reading comprehension skills as measured by the CTBS, Forms U and V.

D. FEATURES OF PROGRAM

Project READ-WRITE is a progarm designed to supplement and enhance the capabilities of a district's basal reading program. Pupils' needs are ascertained by means of formal and/or informal diagnosis and teacher observation. In the case of the effectiveness study presented here, the method employed was that of informal diagnosis and teacher observation.

More than one hundred fifty (150) prescriptions have been designed by the staff of Project READ-WRITE. The prescriptions are used to develop a myriad of reading skills, during large and small group instruction. They are enhanced by a series of language-manipulation techniques. The prescriptions and techniques are used to promote total reading comprehension.

The prescriptions are structured writing or oral activities which motivate the students: to express opinions, make comparisons, come to conclusions; to identify and reflect upon the significant features of a reading; or to carry out a parallel activity in creative composition. The prescriptions make the reading process meaningful for the youngsters. They deepen the children's personal involvement in that which is read, and strengthen their understanding of what it means.

The teacher selects prescriptions that will meet the high priority needs of the students. In addition to developing one major skill and several ancillary skills, each prescription is designed to: strengthen youngsters' sentence sense; help children to frame generalizations inductively; and isolate main ideas, important details, and chronological and logical relationships within each reading selection. Most importantly, the prescriptions compel every child to deal with the reading selection as a whole, instead of in isolated parts, and to involve his/her individual experiences, feelings, and ideas in the reading process.

The following is a heading from one of the prescriptions:

> "Event Sequence
> (Also: Main Idea, Character Analysis, Descriptive Details, Cause/Effect, Character Analysis)
>
> For this particular prescription, the major focus will be on Event Sequence. Also, as the prescription is written out and discussed, the skills listed in parentheses will also be developed to various extents".

When teachers select prescriptions, they look first at the major skill heading in order to meet the high priority need of their students. Next, they look at the skills listed in parentheses in order to capture skills that have been mastered, as well as skills that will later assume higher priority status. In this way, each prescription can be used to accomplish three things simultaneously: (1) address students' high priority needs; (2) reinforce skills that have been mastered; and (3) establish a foundation for developing other skills.

The following is part of a prescription designed to teach Main Idea. Students would respond to the activity, based on something they have read.

> "The name of the story is _____. The story takes place _____, during _____. The main character(s) is/are _____. The problem in the story is _____. The problem is solved when _____. The part of the story I like best is _____."

The paragraph can be completed orally and discussed, or it can be used as a guide for developing individual student compositions, which would be read aloud and discussed. When used as a framework for developing compositions, the entire paragraph is written out. Students do not fill in the blanks, since this tends to cause them to reflect on the reading selection in terms of isolated bits and pieces of information. The first and last lines are intended to promote success, since every student should be able to provide a response. The second line focuses on time and place settings. If these are not explicitly stated in the reading selection, the teacher would help students to respond by developing inferences. The next line requires students to determine which characters are central to the entire theme. Statements pertaining to problem and solution help students to focus on the main idea of the story. After the paragraph has been completed and discussed, language-manipulation techniques are used to further develop the composition. These language-manipulation techniques help students to extend their focus beyond the major skill designated in the prescription heading, and enables them to incorporate descriptive and supporting details, and cause-effect relationships within their compositions.

Prior to implementing the project, teachers are supplied with a copy of the Project READ-WRITE Resource and Instructional Manual, which contains all of the prescriptions and language-manipulation techniques. Teachers attend a one-day intensive workshop, during which they receive hands-on instruction in the following project methods: (1) introducing each of the language-manipulation techniques; (2) selecting and applying prescriptions to meet pupil needs; (3) developing specific reference charts to be used in conjunction with the prescriptions; (4) making Project READ-WRITE an integral part of instruction; (5) developing lessons using Project READ-WRITE in reading and related language arts, as well as in the content areas, for reinforcement.

In implementing the project, emphasis is placed on the essential elements: (1) use of a checklist of reading skills; (2) ascertaining and listing students' needs in priority order; (3) selecting and applying prescriptions to address pupil needs on a priority basis; and (4) maintaining ongoing records of pupils' progress.

F. EXEMPLARY OR UNIQUE FEATURES

Project READ-WRITE is one of the few established programs in the country that develops reading comprehension through writing and other language-manipulation techniques. Project READ-WRITE fosters an integrated language arts approach, as opposed to considering reading, writing, speaking and listening to be separate entities. Also, while many programs use a discrete skills approach in promoting comprehension, READ-WRITE focuses on several skills simultaneously. Finally, Project READ-WRITE involves a truly minimal cost to adopting districts.

G. COSTS

Start-up costs for adopting districts are minimal. Each teacher must attend a one-day workshop; substitute coverage averages $50.00/teacher for the day. A Resource and Instructional Manual must be purchased for

each teacher at a cost of $30.00/manual. There is no trainer's fee; however, districts usually incur costs for travel and lodging which, when calculated in terms of a per teacher cost, averages $25.00/person. The entire per teacher cost, therefore, averages $105.00. Using an average class size of 25 students, the per pupil cost for this program averages $4.20/student. There are no subsequent costs since the Resource and Instructional Manual is non-consumable. (See Table 10 at the end of the submittal for a breakdown of these costs in tabular form).

VI. EVIDENCE OF EFFECTIVENESS

A. DESIGN

The norm-referenced evaluation model described in A Practical Guide to Measuring Project Impact on Student Achievement[1] was used to assess program impact. The assumption of this design is that students who do not participate in a targeted intervention like Project READ-WRITE will maintain a constant percentile and NCE standing from pretest to post-test. Hence, normative data serve as the comparison by which to assess gains made by project students. For Project READ-WRITE, the pretest performance of each program participant was determined using normal curve equivalents (NCEs). Those students in the norm group who obtained the same NCE standing as the READ-WRITE students, thus, served as a surrogate control group. It was assumed that, in the absence of the Project, students would maintain their standing with respect to the norm group from pre-to posttest time. That is, at the time of the posttest, READ-WRITE students would have the same NCE score in terms of the norm groups as they had at pretest time and so their NCE gain, in effect would be zero.[2] If the program made an impact, on the other hand, then the pre-to posttest gain would be significantly greater than zero.

B. DESCRIPTION OF SAMPLE

Project READ-WRITE is currently used by classroom teachers in thirty-five (35) elementary schools in Newark. As a rule, entire faculties have not been fully-trained in the program's implementation process due to financial constraints involved in releasing teachers.

---

1 A Practical Guide to Measuring Project Impact on Student Achievement, Washington, D.C.: U.S. Department of Health, Education and Welfare, 1975.

2 A zero gain in normalized standard score units does not mean that project students learned nothing between pretest and posttest. Rather, the zero gain means that the amount of learning was precisely what would have been predicted under normal maturational growth.

The number of teachers who have been fully-trained to implement the project varies from school-to-school, as do the grade assignments of these individuals. It is important to note that the staffing configurations of the various schools change to various extents from year-to-year. For this reason, a survey is conducted at the beginning of each year to ascertain the grade assignments of those teachers involved in applying the project.

Students included in the final sample were enrolled in classes of fully-trained teachers at the time of posttesting and had both pre- and posttest scores available. There is a moderate degree of transiency within the city of Newark which poses some difficulty in tracking students from year to year. However, the final sample represents a significant percentage of the total population served by Project READ-WRITE in the two years of the study. Furthermore, an analysis of pretest data reveals that the final sample did not significantly differ from the total READ-WRITE population of this critical variable.

Two years of testing results on the California Tests of Basic Skills (CTBS) were used: 1983-1984 and 1984-1985. For the 1983-1984 group, an attempt was made to focus on students of fully trained teachers in schools that were heavily READ-WRITE oriented. For 1984-1985 an attempt was made to include a larger number of teachers from a greater diversity of schools. Thus, the two samples differ significantly in terms of the sample size at each grade level, as well as the number of classes and schools represented. The 1983-1984 group was comprised of 917 students from 55 classes, representing grades 2-7. These students attended 22 schools. The 1984-1985 group was comprised of 2,093 students from 119 classes representing grade 2-7; they attended 35 schools. A breakdown of these two samples are presented in Table 1.

TABLE 1
1983-1984 and 1984-1985 READ-WRITE Students
by Grade Level, Number of Classes, and Number of Schools

Grade	Number of Students	Number of Classes	Number of Schools
2	148	8	7
3	138	9	7
4	117	8	7
5	160	10	6
6	127	8	5
7	227	12	9
2	349	22	15
3	265	16	11
4	195	13	10
5	419	21	17
6	326	19	15
7	539	28	18

C. MEASURE

The instrument used to measure gains in both the 1983-1984 and 1984-1985 samples was the California Test of Basic Skills (CTBS), Levels D-G, Forms U and V. Validity and reliability for the CTBS are described in detail in Comprehensive Test of Basic Skills, Forms U and V, Technical Report. As noted in the manual, construct validity was established through a comparison of the CTBS to the Test of Cognitive Skills (TCS). Reliability coefficients (Kuder-Richardson Formula 20) for the subtest and grade levels used are listed in Table 2.

TABLE 2
Reliability Coefficients (KR-20)
for the CTBS Reading Comprehension Subtest

Subtest	Reliability Coefficient by Grade Level					
	2	3	4	5	6	7
Reading Comp.	.92	.92	.94	.94	.95	.93

The CTBS Reading Comprehension subtest was considered an appropriate measure of the specified Project goals and objectives because the items it tests correspond directly to skills taught through the prescriptions contained in the Project READ-WRITE and Instructional Manual.

D. DATA COLLECTION PROCEDURES

Testing occurred in May of each year. The May, 1983 test served as the pretest for 1983-1984. The May, 1984 test served as both the posttest for the 1983-84 period and the pretest for the 1984-85 period. All testing was conducted within the publishers' recommended testing period, and appropriate levels and forms of the test were administered.

The CTBS was administered by classroom teachers under the supervision of the building principals. Test administrators followed procedures outlined in the administrator's manual. Tests were scored by CTB/McGraw-Hill and returned to the District's Office of Research and Evaluation for analysis. Class printouts of fully trained READ-WRITE teachers were given to a team of research assistants, who then searched prior year class printouts in order to locate pretest scores for the students listed on the publishers' printouts. This process was monitored by district supervisory personnel. The same data collection and roster preparation process was used for both the 1983-1984 and 1984-1985 school years.

E. DATA ANALYSIS PROCEDURES

The analysis procedure used for both years of the study was the correlated t-test. This statistical procedure was performed separately for each grade level in each of the two data sets.

F. EVALUATION RESULTS

For each pair of years (1983-1984 and 1984-1985), students' NCE scores at pretest time were compared to their posttest NCE scores to determine whether they had made significant gains as a result of Project participation. The t-tests calculated for each grade on each data set were all significant at the .001 level for both years of the study. This information is reported in Tables 5 and 6.

TABLE 5
Annual Spring-to-Spring Test Results
for READ-WRITE Students in 1983-1984

Grade	N	Pretest x NCE	Posttest x NCE	NCE Gain	Pretest SD	Posttest SD	t	Significance
2	148	40.99	48.69	7.70	17.38	18.26	4.94	.001
3	138	30.73	38.42	7.69	16.87	12.68	5.95	.001
4	117	37.16	42.59	5.43	8.36	8.47	7.95	.001
5	160	40.85	53.30	12.45	9.06	16.39	11.50	.001
6	127	35.49	41.17	5.68	14.89	14.83	6.34	.001
7	227	42.58	53.92	11.34	14.40	18.55	14.90	.001

TABLE 6
Annual Spring-to-Spring Test Results
for READ-WRITE Students in 1984-1985

Grade	N	Pretest x NCE	Posttest x NCE	NCE Gain	Pretest SD	Posttest SD	t	Significance
2	349	43.73	51.87	8.14	18.89	17.23	8.45	.001
3	265	39.01	45.19	6.18	14.32	12.26	6.47	.001
4	195	36.94	40.90	3.96	9.38	8.10	7.56	.001
5	419	39.93	47.80	7.87	10.21	13.57	14.00	.001
6	326	39.67	44.95	5.28	13.91	15.35	9.57	.001
7	539	40.71	49.63	8.92	13.61	16.27	19.60	.001

Supporting Evidence

For both sets of years, the gains made by students involved in Project READ-WRITE also were compared to gains reported in the National Chapter I assessment data for 1983 (most recent year available). Again, READ-WRITE students significantly outperformed the comparison group at all six grade levels for both years of the study. The evidence is presented in Tables 7 and 8.

TABLE 7
Annual Spring-to- Spring Comparison of
READ-WRITE Gains to National Chapter I Gains for 1983-1984

Grade	N	READ-WRITE NCE Gain	Chapter I NCE Gain	Difference	Posttest SD	t	Significance
2	148	7.70	1.0	6.70	19.63	4.2	.001
3	138	7.69	2.9	4.79	14.93	3.8	.001
4	117	5.43	2.6	2.83	7.57	4.0	.001
5	160	12.45	3.3	9.15	13.19	8.7	.001
6	127	5.68	3.6	2.08	10.87	2.2	.05
7	227	11.34	2.3	9.04	11.71	11.6	.001

TABLE 8
Annual Spring-to-Spring Comparison of
READ-WRITE Gains to National Chapter I Gains for 1984-1985

Grade	N	READ-WRITE NCE Gain	Chapter I NCE Gain	Difference	Posttest SD	t	Significance
2	349	8.14	1.0	7.14	17.68	7.5	.001
3	265	6.18	2.9	3.28	16.60	3.2	.001
4	195	3.96	2.6	1.36	7.31	2.6	.01
5	419	7.87	3.3	4.57	11.70	8.01	.001
6	326	5.28	3.6	1.68	10.04	3.0	.01
7	539	8.92	2.3	6.62	10.52	14.7	.001

G. EDUCATIONAL IMPORTANCE

The educational significance of these data can be judged by examining the effect size, that is by comparing the size of the gains to the standard deviation. Mean differences that exceed one-third the standard deviation (.33) are considered sizeable in a practical sense. For the six grade levels examined (2-7), the ratio of gains to SD units rendered effect sizes greater than one-third of a standard deviation for both 1983-1984 and 1984-1985. The effect sizes are presented in Table 9.

TABLE 9
Effect Sizes Reflecting the Ratio of Gains to SD Units
for READ-WRITE Students on Reading Comprehension Subtest

Grade	1983-1984	1984-1985
2	.44	.43
3	.46	.43
4	.65	.42
5	1.37	.77
6	.38	.38
7	.79	.66

Finally, Project READ-WRITE can be viewed as educationally important in that reading comprehension is a prerequisite to success in all other areas of cognitive development.

H. CONTROL OF RIVAL HYPOTHESES

To determine whether results could be attributed to the program, several possible alternative explanations were considered and rejected. Students were not exposed to other special supplementary programs or interventions during the time period under consideration. Moreover, Project students represent many different schools and many classrooms, suggesting that particular teachers were not responsible for the effects. Finally, there is no evidence suggesting that those students lost through attrition had pretest scores different from the students for whom complete data are available. Thus, the results obtained can be attributed to the type and quality of instruction offered through Project READ-WRITE.

VII. DISSEMINATION/REPLICATION

Project staff consider all aspects of READ-WRITE appropriate for dissemination to other school districts. This claim is supported by the fact the Project READ-WRITE had disseminated its unique approach to 128 schools in nine states during the 1984-1985 school year.

VIII. COSTS

As noted earlier, the costs associated with the adoption of Project READ-WRITE relate to training and materials, and therefore, are non-recurring costs only. These costs are presented in tabular form in Table 10.

TABLE 10
Project READ-WRITE Cost Table

	Installation (Non-Recurring Costs Per Teacher)	Subsequent Years (Recurring Costs)
Personnel	--	--
Personnel Training	$75.00	--
Facilities	--	--
Equipment (Microcomputers)	--	--
Other (Materials, Supplies)	$30.00	--
Total Costs Per Teacher	$105.00	--
Cost Per Student (Est. 25 students/teacher)	$ 4.20	--